The file CARD\_97.DAT contains data from the 1997 follow-up (Cycle 5) examination that were used to perform the exposure analyses for the Cardiovascular chapter (Chapter 14 - 1997 follow-up report).

|          |        | Variable         |  |
|----------|--------|------------------|--|
| Variable | Column | Variable<br>Type | Comment  |
| SEQNO    | 1-5    | Character        | AFHS participant identification  |
| HYPGP    | 6      | Character        | History of essential hypertension, verified by medical records   |
| 1111 01  | Ü      | C11414C1C1       | [A = abnormal (yes); N = normal (no); ' = pre-SEA heart condition or                                   |
|          |        |                  | pre-SEA essential hypertension]  |
| HRTDGP   | 7      | Character        | History of heart disease excluding essential hypertension, verified by                                 |
|          |        |                  | medical records [A = abnormal (yes); N = normal (no); ' = pre-SEA heart                                |
|          |        |                  | condition]   |
| MIGP     | 8      | Character        | History of myocardial infarction, verified by medical records [A = abnormal                            |
| STISCGP  | 9      | Character        | (yes); N = normal (no)]<br>History of stroke or transient ischemic attack, verified by medical records |
| 3113001  | 2      | Character        | [A = abnormal (yes); N = normal (no)]  |
| HYPI     | 10     | Numeric          | History of essential hypertension, verified by medical records [1 = normal                             |
|          |        |                  | (no); 2 = abnormal (yes); . = pre-SEA heart condition or pre-SEA essential                             |
|          |        |                  | hypertension]  |
| HRTDI    | 11     | Numeric          | History of heart disease excluding essential hypertension, verified by                                 |
|          |        |                  | medical records [1 = normal (no); 2 = abnormal (yes); . = pre-SEA heart                                |
| MII      | 10     | NT :             | condition]   |
| MII      | 12     | Numeric          | History of myocardial infarction, verified by medical records [1 = normal (no); 2 = abnormal (yes)]    |
| STISCI   | 13     | Numeric          | History of stroke or transient ischemic attack, verified by medical records                            |
| BIIBCI   | 13     | rumene           | [1 = normal (no); 2 = abnormal (yes)]  |
| PSHYP    | 14     | Character        | Pre-Southeast Asia heart condition or pre-SEA essential hypertension,                                  |
|          |        |                  | verified by medical records $[Y = yes; N = no]$  |
| PSHRTD   | 15     | Character        | Pre-Southeast Asia heart condition, excluding essential hypertension,                                  |
|          |        |                  | verified by medical records $[Y = yes; N = no]$  |
| EXPGP    | 16-20  | Character        | Exposure group [a) RH = Ranch Hand; b) C = Comparison]   |
| EXPI     | 21     | Numeric          | Exposure group [1 = Ranch Hand; 2 = Comparison]  |
| BDATE    | 22-31  | Character        | Date of birth (month/day/year)   |
| AGEGR    | 32-37  | Numeric          | Age at the 1997 physical exam (years)  |
| AGEGP    | 38-51  | Character        | Age at the 1997 physical exam [1) BORN < 1942; 2) BORN >= 1942]  |
| AGEI     | 52     | Numeric          | Age at the 1997 physical exam [1 = born before 1942; 2 = born in or after 1942]                        |
| RACEGP   | 53-57  | Character        | Race [1) BL = Black; 2) NB = non-Black]  |
| RACEI    | 58     | Numeric          | Race [1 = Black; 2 = non-Black]  |
| OCCGP    | 59-64  | Character        | Occupation [1) OFF = officer; 2) EFL = enlisted flyer; 3) EGC = enlisted                               |
|          |        |                  | groundcrew]  |
| OCCI     | 65     | Numeric          | Occupation [1 = officer; 2 = enlisted flyer; 3 = enlisted groundcrew]                                  |
| PERSGP   | 66-69  | Character        | Personality type from Jenkins Activity Survey (direction) [1) A; 2) B;                                 |
|          |        |                  | " = missing (refused or test not scorable)]  |
| PERSI    | 70     | Numeric          | Personality type from Jenkins Activity Survey (direction) $[1 = A; 2 = B;$                             |
|          |        |                  | . = missing (refused or test not scorable)]  |
| CURCIG   | 71-76  | Numeric          | Current cigarette smoking (cigarettes/day) [. = missing]   |
| PCKYRS   | 77-83  | Numeric          | Lifetime cigarette smoking history (pack-years) [. = missing]  |
| CURCIGGP | 84-95  | Character        | Current cigarette smoking (cigarettes/day); [1) 0 – NEVER = never                                      |
|          |        |                  | smoked; 2) $0 - FORMER = former smoker$ ; 3) $>0 - 20$ ; 4) $>20$ ; "= missing]                        |
| CURCIGI  | 96     | Numeric          | Current cigarette smoking (cigarettes/day); $[1 = 0 \text{ (never smoked)}; 2 = 0]$                    |
|          | 70     | 1 (01110110      | (former smoker); $3 = >0 - 20$ ; $4 = >20$ ; . = missing]  |
| PCKYRSGP | 97-106 | Character        | Lifetime cigarette smoking history (pack-years)[1) 0; 2) $>0 - 10$ ; 3) $>10$ ;                        |
|          |        |                  | "= missing]  |

|          |         | Variable  |   |
|----------|---------|-----------|---|
| Variable | Column  | Type      | Comment   |
| PCKYRSI  | 107     | Numeric   | Lifetime cigarette smoking history (pack-years) $[1 = 0; 2 = >0 - 10; 3 = >10; . = missing]$  |
| DRKYR    | 108-114 | Numeric   | Lifetime alcohol history (drink-years) [. = missing]  |
| CALC     | 115-120 | Numeric   | Current alcohol use (drinks/day) [. = missing]  |
| CALCGP   | 121-129 | Character | Current alcohol use (drinks/day) [1) $0 - 1$ ; 2) $>1 - 4$ ; 3) $>4$ ; "= missing]  |
| CALCI    | 130     | Numeric   | Current alcohol use (drinks/day) $[1 = 0 - 1; 2 = >1 - 4; 3 = >4; . = missing]$   |
| DRKYRGP  | 131-140 | Character | Lifetime alcohol history (drink-years) [1) 0; 2) $>0 - 40$ ; 3) $>40$ ;<br>'= missing]  |
| DRKYRI   | 141     | Numeric   | Lifetime alcohol history (drink-years) $[1 = 0; 2 = >0 - 40; 3 = >40;$<br>. = missing]  |
| BFAT     | 142-147 | Numeric   | 1997 body fat (percent)   |
| BFATGP   | 148-161 | Character | 1997 body fat [1) OBESE (>25 percent); 2) LEAN/NORMAL (≤25 percent)]  |
| BFATI    | 162     | Numeric   | 1997 body fat [1 = obese (>25 percent); $2 = \text{lean/normal} (\le 25 \text{ percent})$ ]   |
| CHOLGP   | 163-173 | Character | Cholesterol (mg/dl) $[1] <=200; 2) >200-239; 3) >=240$  |
| CHOLI    | 174     | Numeric   | Cholesterol (mg/dl) $[1 = \le 200; 2 = >200-239; 3 = \ge 240]$  |
| CHOL     | 175-177 | Numeric   | Cholesterol (mg/dl)   |
| HDL      | 178-180 | Numeric   | High density lipoprotein (HDL) (mg/dl) [. = missing]  |
| HDLGP    | 181-191 | Character | High density lipoprotein (HDL) [NORMAL: >35 (mg/dl); LOW: 0-35 (mg/dl); ' = missing]  |
| HDLI     | 192     | Numeric   | High density lipoprotein (HDL) [1 = normal (>35 mg/dl); 2 = low (0-35 mg/dl); . = missing]  |
| CHLRAT   | 193-209 | Numeric   | Cholesterol-HDL ratio [. = missing]   |
| CHLRATGP | 210-220 | Character | Cholesterol-HDL ratio [NORMAL: <=5; HIGH: >5; ' '= missing]   |
| CHLRATI  | 221     | Numeric   | Cholesterol-HDL ratio $[1 = normal (\le 5); 2 = high (> 5); . = missing]$   |
| FAMHDSGP | 222     | Character | Family history of heart disease [N = no; Y = yes; ' = missing]  |
| FAMHDSI  | 223     | Numeric   | Family history of heart disease $[1 = no; 2 = yes; . = missing]$  |
| FHDB45GP | 224     | Character | Family history of heart disease before 45 [N = no; Y = yes; ' = missing]  |
| FHDB45I  | 225     | Numeric   | Family history of heart disease before 45 [ $1 = no; 2 = yes; . = missing$ ]  |
| BPMEDGP  | 226     | Character | Currently taking blood pressure medication $[Y = yes; N = no]$  |
| BPMEDI   | 227     | Numeric   | Currently taking blood pressure medication $[1 = yes; 2 = no]$  |
| DBCLSGP  | 228-238 | Character | Diabetic class [1) NORMAL (2-hour postprandial glucose <140 mg/dl);<br>2) IMPAIRED (2-hour postprandial glucose >140-200 mg/dl); 3)<br>DIABETIC (past history or 2-hour postprandial glucose ≥ 200 mg/dl);                          |
| DDCI GI  | 220     | <b>.</b>  | "= unable to determine]   |
| DBCLSI   | 239     | Numeric   | Diabetic class [1 = normal (2-hour postprandial glucose <140 mg/dl);<br>2 = impaired (2-hour postprandial glucose >140-200 mg/dl); 3 = diabetic   |
|          |         |           | (past history or 2-hour postprandial glucose ≥ 200 mg/dl); . = unable to determine]   |
| ID       | 240     | Character | Exposure group (for participants with a dioxin assay) [C = Comparison; R = Ranch Hand; ' = no dioxin assay]   |
| REPORT   | 241-243 | Character | Results of dioxin analysis (for participants with a dioxin assay and a good result) [G= good result; GND = good result, below limit of detection;   |
| CURRENT  | 244-249 | Numeric   | ' = missing] 1987 lipid-adjusted dioxin level (actual measurement or 1987 level extrapolated from dioxin measurement closest to time of duty in Southeast Asia - for participants with a dioxin assay and a good result) (parts per |
| REPTYR   | 250-251 | Character | trillion (ppt)) [. = missing] Year from which assay is used for dioxin determination (for participants with a dioxin assay and a good result) [87 = 1987; 92 = 1992; 97 = 1997; P = pilot test (conducted in 1987); ' ' = missing]  |

|          |         | Variable  |   |
|----------|---------|-----------|---|
| Variable | Column  | Type      | Comment   |
| INITIAL  | 252-258 | Numeric   | Initial dioxin estimate (parts per trillion (ppt)), extrapolated from 1987 or recent lipid-weight dioxin measurement for Ranch Hands with a 1987 or recent measurement > 10 ppt [. = missing or not calculated]   |
| LOGINIT  | 259-275 | Numeric   | Log (base 2) of initial dioxin for Ranch Hands with a 1987 or recent measurement > 10 ppt [. = missing or not calculated]   |
| PBFDBDRW | 276-290 | Numeric   | Body fat (percent) at time of dioxin blood draw for participants with a dioxin assay and a good result [. = missing]  |
| LGINITGP | 291-299 | Character | Log (base 2) of initial dioxin for Ranch Hands with a 1987 or recent measurement > 10 ppt [1) LOW (initial dioxin: 27 - 63 ppt); 2) MEDIUM (initial dioxin: >63 - 152 ppt); 3) HIGH (initial dioxin: >152 ppt); ''= missing or not calculated]  |
| LGINITI  | 300     | Numeric   | Log (base 2) of initial dioxin for Ranch Hands with a 1987 or recent measurement > 10 ppt [1 = low (initial dioxin: 27 - 63 ppt); 2 = medium (initial dioxin: >63 - 152 ppt); 3 = high (initial dioxin: >152 ppt); . = missing or not calculated]   |
| DXCATGP  | 301-311 | Character | Categorized dioxin [1) COMP<=10 (Comparisons: 1987 dioxin ≤ 10 ppt);<br>2) RH <=10 (background Ranch Hands: 1987 dioxin ≤ 10 ppt); 3) LOW<br>RH (Ranch Hands: 1987 dioxin > 10 ppt and initial dioxin > 10 - 94 ppt);<br>4) HIGH RH (Ranch Hands: 1987 dioxin > 10 ppt and initial dioxin > 94<br>ppt); ' = missing or Comparisons with 1987 dioxin > 10 ppt] |
| DXCAT2GP | 312-322 | Character | Categorized dioxin [a) RH <=10 (background Ranch Hands: 1987 dioxin ≤ 10 ppt); b) LOW RH (Ranch Hands: 1987 dioxin > 10 ppt and initial dioxin >10 - 94 ppt); c) HIGH RH (Ranch Hands: 1987 dioxin >10 ppt and initial dioxin >94 ppt); d) COMP<=10 (Comparisons: 1987 dioxin ≤ 10 ppt); ' = missing or Comparisons with 1987 dioxin > 10 ppt]                |
| DXCAT3GP | 323-338 | Character | Categorized dioxin [1) COMP<=10 (Comparisons: 1987 dioxin ≤ 10 ppt);<br>2) RH <=10 (background Ranch Hands: 1987 dioxin ≤ 10 ppt); 3) LOW +<br>HIGH RH (Ranch Hands: 1987 dioxin > 10 ppt and initial dioxin > 10   |
| DXCATI   | 339     | Numeric   | ppt); ' ' = missing or Comparisons with 1987 dioxin > 10 ppt] Categorized dioxin [1 = Comparisons: 1987 dioxin ≤ 10 ppt; 2 = background Ranch Hands: 1987 dioxin ≤ 10 ppt; 3 = low Ranch Hands: 1987 dioxin > 10 ppt and initial dioxin > 10 - 94 ppt; 4 = high Ranch Hands: 1987 dioxin > 10 ppt and initial dioxin > 94 ppt; . = missing                    |
| DXCAT2I  | 340     | Numeric   | or Comparisons with 1987 dioxin > 10 ppt] Categorized dioxin [1 = background Ranch Hands: 1987 dioxin $\leq$ 10 ppt; 2 = low Ranch Hands: 1987 dioxin > 10 ppt and initial dioxin > 10 – 94 ppt; 3 = high Ranch Hands: 1987 dioxin > 10 ppt and initial dioxin > 94 ppt; 4 = Comparisons: 1987 dioxin $\leq$ 10 ppt; . = missing or Comparisons               |
| DXCAT3I  | 341     | Numeric   | with 1987 dioxin > 10 ppt] Categorized dioxin [1 = Comparisons: 1987 dioxin ≤ 10 ppt; 2 = background Ranch Hands: 1987 dioxin ≤ 10 ppt; 3 = low plus high Ranch Hands: 1987 dioxin > 10 ppt and initial dioxin > 10 ppt; . = missing  |
| LGCURRGP | 342-350 | Character | or Comparisons with 1987 dioxin > 10 ppt]<br>For Ranch Hands with a dioxin assay and a good result: [1) LOW (1987 dioxin: $\leq$ 7.9 ppt); 2) MEDIUM (1987 dioxin > 7.9 – 19.6 ppt); 3) HIGH  |
| LGCURRI  | 351     | Numeric   | (1987 dioxin > 19.6 ppt); ' = missing (includes Comparisons)]<br>For Ranch Hands with a dioxin assay and a good result: $[1 = low (1987 dioxin: \le 7.9 ppt); 2 = medium (1987 dioxin: >7.9 - 19.6 ppt); 3 = high$  |
| LOGCURR  | 352-367 | Numeric   | (1987 dioxin >19.6 ppt); . = missing (includes Comparisons)]<br>Log (base 2) of (1987 dioxin + 1) for Ranch Hands with a dioxin assay and a good result [. = missing (includes Comparisons)]  |
| BFAT97   | 368-373 | Numeric   | 1997 body fat (percent)   |
| SYSTLIC  | 374-376 | Numeric   | Systolic blood pressure (mm Hg)   |

|          |         | Variable  |  |
|----------|---------|-----------|--|
| Variable | Column  | Type      | Comment  |
| SYSTLCGP | 377     | Character | Systolic blood pressure [A = abnormal (> 140 mm Hg); N = normal (≤ 140 mm Hg)] |
| SYSTLCI  | 378     | Numeric   | Systolic blood pressure [1 = normal (≤ 140 mm Hg); 2 = abnormal (> 140 mm Hg)] |
| DIASTLC  | 379-381 | Numeric   | Diastolic blood pressure (mm Hg)   |
| DIASTLGP | 382     | Character | Diastolic blood pressure [A = abnormal (> 90 mm Hg); N = normal (≤ 90 mm Hg)]  |
| DIASTLI  | 383     | Numeric   | Diastolic blood pressure [1 = normal (≤ 90 mm Hg); 2 = abnormal (> 90 mm Hg)]  |
| HRTSNDGP | 384     | Character | Heart sounds [A = abnormal; N = normal]  |
| ECGGP    | 385     | Character | Overall electrocardiograph [A = abnormal; N = normal]                          |
| STTGP    | 386     | Character | ECG: Nonspecific ST- and T-wave changes [A = abnormal; N = normal]             |
| BRADYGP  | 387     | Character | ECG: Bradycardia [A = abnormal; N = normal]                                    |
| TACHYGP  | 388     | Character | ECG: Tachycardia [A = abnormal; N = normal]                                    |
| ARHTHMGP | 389     | Character | ECG: Arrhythmia [A = abnormal; N = normal]                                     |
| PRIORGP  | 390     | Character | ECG: Evidence of prior myocardial infarction [A = abnormal; N = normal]        |
| HRTSNDI  | 391     | Numeric   | Heart sounds $[1 = normal; 2 = abnormal]$                                      |
| ECGI     | 392     | Numeric   | Overall electrocardiograph [1 = normal; 2 = abnormal]                          |
| STTI     | 393     | Numeric   | ECG: Nonspecific ST- and T-wave changes [1 = normal; 2 = abnormal]             |
| BRADYI   | 394     | Numeric   | ECG: Bradycardia [1 = normal; 2 = abnormal]                                    |
| TACHYI   | 395     | Numeric   | ECG: Tachycardia [1 = normal; 2 = abnormal]                                    |
| ARHTHMI  | 396     | Numeric   | ECG: Arrhythmia [1 = normal; 2 = abnormal]                                     |
| PRIORI   | 397     | Numeric   | ECG: Evidence of prior myocardial infarction [1 = normal; 2 = abnormal]        |
| LBBBGP   | 398     | Character | ECG: Left bundle branch block [A = abnormal; N = normal]                       |
| LBBBI    | 399     | Numeric   | ECG: Left bundle branch block [1 = normal; 2 = abnormal]                       |
| RBBBGP   | 400     | Character | ECG: Right bundle branch block [A = abnormal; N = normal]                      |
| RBBBI    | 401     | Numeric   | ECG: Right bundle branch block [1 = normal; 2 = abnormal]                      |
| OTHERGP  | 402     | Character | ECG: Other diagnoses [A = abnormal; N = normal]                                |
| OTHERI   | 403     | Numeric   | ECG: Other diagnoses [1 = normal; 2 = abnormal]                                |
| FUNDEXGP | 404     | Character | Funduscopic exam [A = abnormal; N = normal; ' = missing]                       |
| FUNDEXI  | 405     | Numeric   | Funduscopic exam [1 = normal; 2 = abnormal; . = missing]                       |
| CRTDBGP  | 406     | Character | Carotid bruits [A = abnormal; N = normal]                                      |
| CRTDBI   | 407     | Numeric   | Carotid bruits [1 = normal; 2 = abnormal]                                      |
| RADIALGP | 408     | Character | Radial pulses $[A = abnormal; N = normal]$                                     |
| FEMRALGP | 409     | Character | Femoral pulses [A = abnormal; N = normal; ' ' = missing]                       |
| POPLITGP | 410     | Character | Popliteal pulses [A = abnormal; N = normal; ' = missing]                       |
| DPEDISGP | 411     | Character | Dorsalis pedis pulses [A = abnormal; N = normal; ' = missing]                  |
| PTIBIAGP | 412     | Character | Posterior tibial pulses [A = abnormal; N = normal; ' '= missing]               |
| RADIALI  | 413     | Numeric   | Radial pulses [1 = normal; 2 = abnormal]                                       |
| FEMRALI  | 414     | Numeric   | Femoral pulses [1 = normal; 2 = abnormal; . = missing]                         |
| POPLITI  | 415     | Numeric   | Popliteal pulses [1 = normal; 2 = abnormal; . = missing]                       |
| DPEDISI  | 416     | Numeric   | Dorsalis pedis pulses [1 = normal; 2 = abnormal; . = missing]                  |
| PTIBIAI  | 417     | Numeric   | Posterior tibial pulses [1 = normal; 2 = abnormal; . = missing]                |
| LEGPULGP | 418     | Character | Leg pulses [A = abnormal; N = normal; ' ' = missing]                           |
| LEGPULI  | 419     | Numeric   | Leg pulses [1 = normal; 2 = abnormal; . = missing]                             |
| PERPULGP | 420     | Character | Peripheral pulses [A = abnormal; N = normal; ' ' = missing]                    |
| PERPULI  | 421     | Numeric   | Peripheral pulses [1 = normal; 2 = abnormal; . = missing]                      |

| Variable | Column | Variable<br>Type | Comment   |
|----------|--------|------------------|---|
| CLDVASGP | 422    | Character        | Intermittent claudication and vascular insufficiency index [A = abnormal; |
|          |        |                  | N = normal; ' '= missing]   |
| CLDVASI  | 423    | Numeric          | Intermittent claudication and vascular insufficiency index [1 = normal;   |
|          |        |                  | 2 = abnormal; . = missing]  |